Global Knowledge®

TechRepublic®

2010 IT Skills and Salary Report

A Comprehensive Survey from Global Knowledge and TechRepublic

2010 IT Skills and Salary Report

Introduction

The global recession that began in 2008 has impacted almost everyone, either through job loss, reduction in salary and benefits, or job change. This year's salary survey, the third in partnership between Global Knowledge and TechRepublic, captures the magnitude of changes that have impacted the IT profession. To this end, questions have been added that provide a deeper examination of job satisfaction, current and expected business conditions, and key trends such as use of consultants and expected critical areas for 2010.

Over 19,500 IT professionals worldwide responded to the survey, a 12% increase over the 2009 survey. Respondents from the United States and Canada accounted for 92% of all responses, similar to last year's percentage. Complete survey methodology can be found on page 11.

The recession has held salaries in check for the IT profession. The average salary for respondents was $82,115, up less than one percent over what was reported in the *2009 IT Skills and Salary Report* (**Figure 1**). This is significantly less than the 10% gain seen between 2008 and 2009; however, it is consistent with broader salary trends in the United States.[1] Less than half of this year's respondents (43%) reported receiving a salary increase, down from 70% in the prior year. Two-thirds of those that reported receiving a raise indicated the primary reason was performance in their current position (65%). Over 46% indicated their salaries were capped without a raise. One in nine respondents (11%) indicated their salaries had been reduced.

Although the percentage receiving a raise declined significantly, the average amount of the raise increased from 6% to 10%. The percentage of respondents receiving a bonus dropped seven points from 46% in 2009 to 39% in the current survey. As with salaries, the change in the average bonus was flat, at less than one percent ($8,654 vs. $8,575 in 2009). The median bonus in the current survey, or the point where half are above and half are below, was $4,889.

Demographically, the respondents look similar to prior years. Average age was 42, with an average tenure in the industry

Participant Profile

	2010	2009	2008
Base Salary	$82,115	$81,600	$73,900
Received a Raise	43%	70%	80%
Raise/Increase Amount	10%	6%	4%
Received a Bonus	39%	46%	49%
Average Bonus	$8,654	$8,575	$3,937
Average Age	43	42	43
Years in IT	15	15	14
Male vs. Female	3.9:1	3.3:1	3:1
College Degree	69.7%	67%	59%

Figure 1

Overall, 43% of respondents received a raise; however, systems engineers, security professionals, and technical analysts were significantly more likely to receive raises than their counterparts in other fields.

of 15 years. More males responded this year than in prior iterations. For every female respondent there were four male responses. The percentage of respondents having an undergraduate or graduate degree has increased steadily since 2008. In the current sample, over 69% of respondents reported having at least a four-year degree, up from 59% in 2008.

Does Money Equate to Job Satisfaction?

Over 70% of the respondents reported they were satisfied at work with over 40% being either 'very' or 'extremely' satisfied with their job (**Figure 2**). This shows little change from last year's percentages. This is somewhat surprising given the depth of the recession. However, it could be a reflection that many are simply happy to be employed.

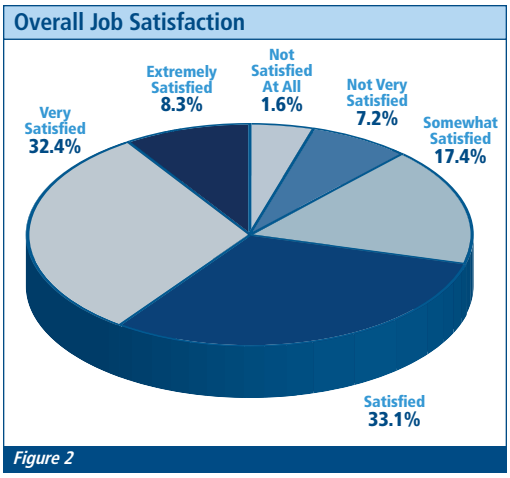


Figure 2

Does the adage about money buying happiness also apply to IT professionals? In general, there is a positive relationship between salary and job satisfaction, with satisfaction increasing as salary increases (**Figure 3**). From another perspective, nine out of 10 respondents fall into one of two camps—those who feel they are compensated fairly (37%) and those who feel they are underpaid (57%). The remainder either feel they make more than they are worth, or they make a lot, but are worth it. Of those who report feeling they are compensated fairly, over half (52%) are highly satisfied at work, compared to 31% of those who believe they are underpaid (**Figure 4**). Professionals who feel they are fairly compensated reported an average salary of $86,658. This is 21% higher than the $74,266 average for those who believe they should be paid more for their skills.

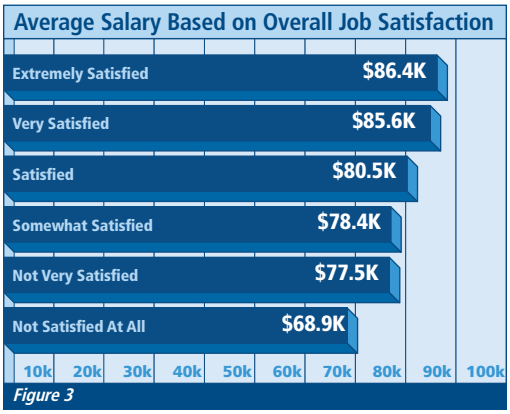


Figure 3

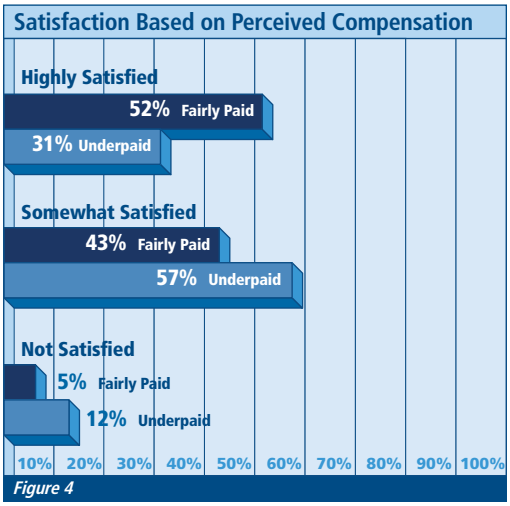


Figure 4

Although the majority of respondents indicate they are satisfied with their jobs, this has not stopped a third of them from considering new opportunities. From this group, the majority (70%) are actively looking for a new job or plan to do so in the first quarter of 2010. But unless they possess skills in specialty areas they will face a difficult time, as they will be competing with the unemployed. In the United States there are now six times as many workers seeking work as there are job openings.[2] In addition, they will be competing against offshoring. According to eWeek.com, during 2010–2014 as many as two million back-office IT jobs in areas such as infrastructure services, help desk, and data centers are expected to be lost. The bright news is that positions that focus on strategy, architecture, project management, and relationship management are shielded better from offshoring pressure.[3]

A significant inverse relationship exists between salary satisfaction and job hunting. Those that report being satisfied with their current salary are less likely to be looking for a new position compared to those who are not satisfied with their current earnings (21% vs. 41%) **(Figure 5)**. Concurrently, those that report not being satisfied with their current positions are five times more likely to indicate they are job hunting than those who report being satisfied on the job (77% vs. 15%) **(Figure 6)**.

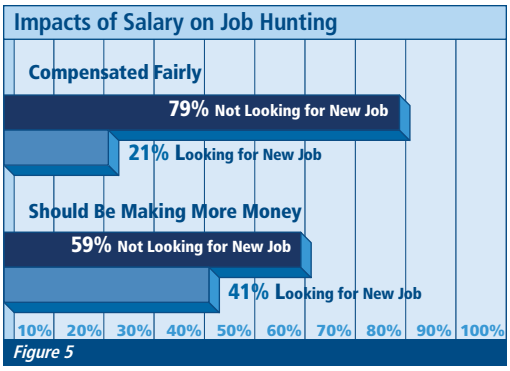


Figure 5

Figure 6

Looking Beyond Salary – Other Factors Influencing Job Satisfaction

Not surprisingly, competitive salary was the most often selected factor associated with job satisfaction, with 88% selecting it from a multiple response list. However, it was not the only factor with relevance. On average, respondents selected eight factors from a list of 12. Other key factors include:

- Respect for work performed (82%)
- Opportunity to increase skills (80%)
- Comprehensive benefits (79%)
- Work-life balance (78%)
- Job security (74%)
- Communication with management (59%)
- New responsibilities (59%)
- Peer communications (58%)
- Promotions (51%)
- Bonus opportunities (49%)
- Others (49%)

The opportunity to increase skills is more important to those with less career tenure than it for those with more experience. Over 85% of workers with up to five years of tenure value opportunities to increase skills, compared to 74% of those with over 20 years on the job. The ability to be promoted is valued by 59% of those with five or fewer years of tenure compared to 39% for those further along in their careers. New responsibilities, not necessarily involving skill development, are more highly valued by younger workers (62%) than their more tenured colleagues (52%). Interest in work/life balance is less important to both younger and older workers, but peaks for those in their mid-career, when family pressures are likely to be greatest.

New responsibilities are more highly valued by younger workers (62%) than their more tenured colleagues (52%).

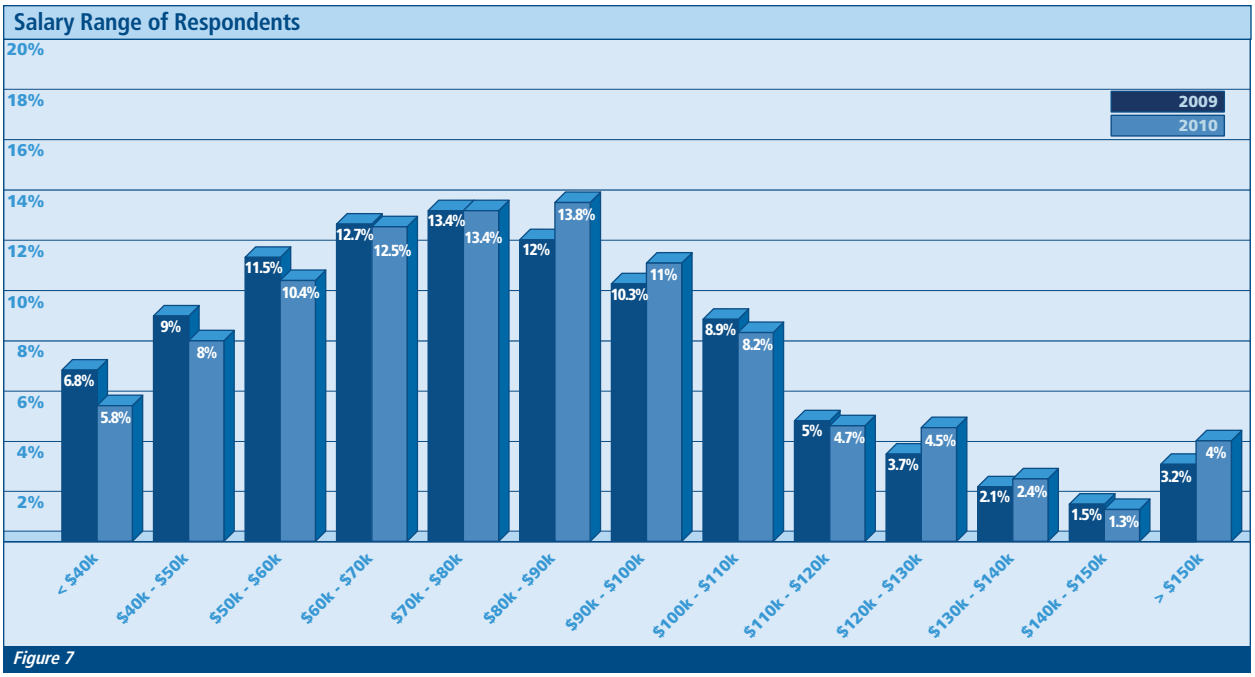


Figure 7

Several important differences exist between men and women in regard to factors associated with job satisfaction. Women are significantly more interested in new responsibilities (65% vs. 57%), work/life balance (83% vs. 77%), communication with peers and management (66% vs. 56%), and respect for the work performed (88% vs. 81%).

Trends in Base Pay, Bonuses, and Benefits

What a difference a year makes, especially when that year involves a significant recession (**Figure 7**). In the year between the 2009 and 2010 surveys, 70% of the respondents reported receiving an increase in salary and that raise averaged six percent. The percentage who reported having received a raise in this year's survey dropped to 43%. The average raise, however, was 9.8% or $7,468 (median raise was 4.6% or $4,000). Two-thirds who received a raise saw an increase of $5,000 or less.

The likelihood of seeing a salary increase was not consistent across the board. The percentage of those receiving raises skewed higher for respondents under age 35, those involved in data security, technical analysis, or systems engineering, those working in departments with staffs of 250 people or more, and those earning in the $60,000–$140,000 range.

Several job roles showed a decreased likelihood of receiving a raise relative to the overall norm of 43%: IT consultants (35%);

A greater percentage of those who received IT training also received a raise when compared to those who did not train in the prior year (48% vs. 37%).

senior IT management (33%); sales and marketing (25%); senior management (18%); and business consultants (36%).

In regard to bonuses, 85% reported being involved in a bonus program. From this group, 46% received a bonus, the same percentage as last year. Average bonus was $8,654 (up less than 1%) with a median of $4,889 (down 2%). Personal performance was the primary reason respondent's received a bonus, followed by profit-sharing and meeting project goals. For those who were bonus eligible, but did not receive one, there is little optimism, as 65% indicated they did not expect a bonus in the coming year.

In good times a generous benefits package can be a significant bargaining chip when companies are talent hunting. During a recession, those benefits packages often come under increased scrutiny. Overall, respondents report they are still receiving a slate of benefits, although cuts have occurred in a few key areas (**Figure 8**). The percentages of respondents reporting that they received employer-paid training and profit-sharing declined between the 2009 and 2010 surveys. Going against the trend, the percentage receiving health insurance rose from 77% to 85%.

Other more subtle trends are also in place where benefits are concerned. Although only 20% of respondents report receiving profit-sharing, this benefit itself was the most likely to be eliminated or decreased in scope. Health insurance, employer-paid training, and 401k contributions were the most likely to have been hit with decreases in company contributions. Clearly, the trend of companies curtailing expenses by reducing the cost of benefit packages is continuing.

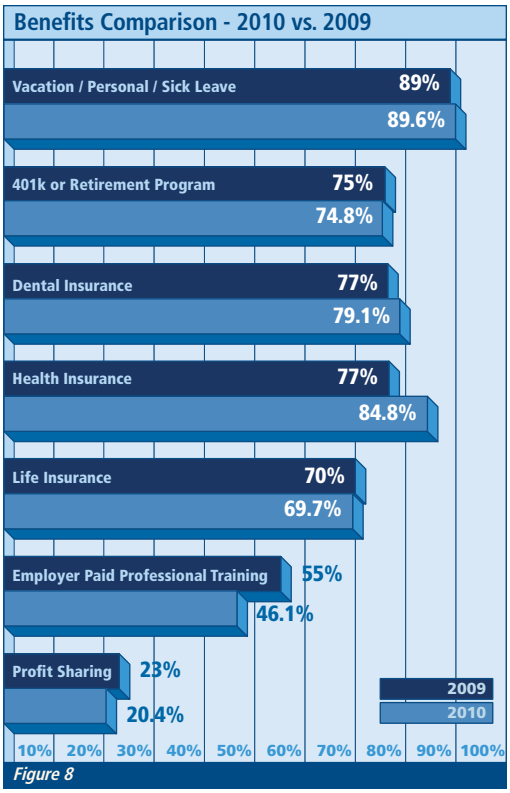


Figure 8

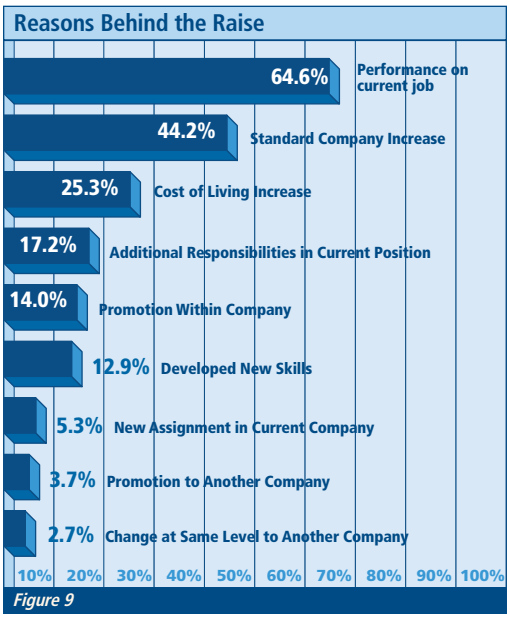


Figure 9

The Impact of Training and Certification on Salary

Figure 9 shows that job performance was the key driver for those who received a raise. Both managers and staff agree that training and certifications impact job performance. More than 84% of managers who sent their staff to receive training felt staff members were more effective in their job role after training. Non-managerial respondents answered similarly, with 78% indicating they felt more effective at their jobs after training.

Do certifications have an impact on current base salary? The perception by non-managerial respondents is "yes". Over two-thirds of all respondents (11,916) took some form of training in the prior 12 months. From this group, more than half (6,471) did so to prepare for certification exams. For these respondents there was a significant positive relationship between post-certi-

fication effectiveness and their certification's perceived impact to base salary. In other words, those who felt more effective on the job after certification also were more apt to say that certifications positively impacted salary. Overall, professionals who had earned an IT or project management certification during the last five years earned an average of $5,242 more than their counterparts ($85,628 vs. $80,386).

The relationship between training and salary is validated further when reviewing base pay for those who trained during the last year and those that did not. The average salary for those that trained, across all training categories, was $83,106, versus $80,130 for those who did not. This trend is similar to that identified in the 2009 study.

However, salary is not determined solely by training or certification. Other variables have significant impact. One of those is tenure in the profession. Two-thirds of all respondents took some form training in the last year. That percentage was consistent across tenure groups, indicating that the benefits of training are clearly visible across career stages.

Does the type of training one receives make a difference? Again, the answer is "yes". After controlling for tenure, respondents who took only IT training had lower average salaries than their counterparts who did not take training in the prior year ($74,025 vs. $80,130). However, if the respondent also took some form of project management or business-related training (including ITIL®) in addition to his or her IT training, that deficit reversed ($86,021 vs. $80,130).

Certifications and Salary

One-third of respondents (5,891) earned a project-management-, IT-, or business-skills-related certification during the past five years. This group was asked to select which certifications they possessed from a list of more than 145 industry certifications. **Figure 10** highlights the top 20 certifications in terms of response. Seven percent of the respondents (1,236) hold a Project Management Professional (PMP®) certification. Average salary for those with this certification is $104,253, placing this group in the top 20% of salaries.

This is followed by the Cisco Certified Network Associate (CCNA) certification, held by 1,116 respondents, and the Microsoft Certified Professional (MCP) certification, held by 1,038 respondents. Average salaries for these certifications are $79,695 and $74,438, respectively. Rounding out the top five

Salaries by Popular Certifications

Certification	Salary	Base*
PMP® - Project Management Professional	$104,253	1,236
CCNA - Cisco Certified Network Associate	$79,695	1,116
MCP - MS Certified Professional	$74,438	1,038
MCSE - MS Certified Systems Engineer	$86,454	830
ITIL® v3 Foundation	$101,185	549
MCSA - MS Certified System Administrator	$76,337	527
ITIL v2 Foundation	$102,128	490
CompTIA - Network+	$70,902	475
CompTIA - A+	$68,631	469
CompTIA - Security+	$76,844	417
CISSP - Cert Info Sys Security Professional	$99,928	373
CCNP - Cisco Certified Network Professional	$89,864	324
Other Project Management Certificate	$95,979	286
VMware Certified Professional	$91,271	264
Six Sigma	$111,908	236
MCITP - MS Certified IT Professional	$82,044	234
Other Business Process Certifications	$94,383	226
CCDA - Cisco Certified Design Associate	$93,953	223
MCDST - MS Certified Desktop Support Technician	$70,197	188
MCTS - Windows Vista, Configure	$71,786	176

Figure 10 ** Number of Survey Respondents*

Click here to view average salaries of additional certifications.

Over one-third of respondents who have a Microsoft Certified Technology Specialist (MCTS) certification hold multiple MCTS designations. Those with multiple MCTS designations earn an average of $87,041, or $13,000 more than those who hold only one MCTS.

are the Microsoft Certified Systems Engineer (MCSE), with an average salary of $86,454 and the ITIL® V3 Foundation, with $101,185 as the average salary.

Job Roles

More than 33 different job roles were identified in this year's survey. "IT Managers" formed the largest group of respondents. These respondents possess an average of 16 years' experience with an average salary of $87,934. Overall, half of the respondent base is at the staff level with an average of 12 years' tenure and an average salary of $71,534. Three out of ten industry professionals are at the middle management level, with an average salary of $85,391. Eleven percent of the industry is in senior manager roles with an average salary of $103,248. Four percent of IT professionals find themselves at the executive-suite level with average salaries of $119,696.

Figure 11 highlights the average salaries for the top 20 job roles by response. Included are IT managers, network administrators, project managers, system administrators, department heads, helpdesk technicians, and consultants, among others. This group accounts for approximately 85% of the industry.

Respondents tasked with supervising the work of others have greater average salaries than their non-supervisory counterparts. Supervisors, at all levels, account for 36% of the industry. The difference in average salaries between supervisors and their staff ranges from $7,890 for front-line managers, $8,224 for middle-management, and $11,343 for senior management.

One-third of respondents have budget responsibility for their organizations. With this additional level of responsibility comes additional compensation. Those with budget responsibility earn an average of $93,711, or 23% more than their counterparts. Overall, 32% have staffing responsibilities and earn an average of $98,559, or 32% more than their counterparts without accountability for staffing. These averages are inclusive of all job responsibilities, from entry-level through executive management.

Salaries by Job Role

Job Role	Salary	Base*
IT Manager	$87,934	2,068
Network Administrator	$63,160	1,272
IT Project Manager	$94,457	1,166
System Administrator	$67,393	1,123
IT Department Head or Director	$100,757	926
IT Consultant	$87,739	878
IS-IT-Technical Analyst	$69,886	876
Systems Engineer	$85,032	795
Technical Support or Helpdesk Professional	$54,732	772
IT Architect	$102,894	674
Software or Applications Developer	$82,151	545
Other IS, IT or Technology Function	$65,560	523
Telecom or Voice Professional	$74,580	499
Engineer	$84,446	486
Technician	$53,342	484
Security Professional	$87,408	445
Network or LAN Manager	$77,788	444
IT Executive (CIO, CTO, etc.)	$127,073	410
Business Analyst	$75,525	399
Database Administrator or Manager	$83,256	371

Figure 11 ** Number of Survey Respondents*

The greatest gain in average salary (15%) comes for those who move from departments with fewer than ten staff members to those with 10–49 team members.

Salary by IT Staff Size

There are many benefits associated with working for a smaller company; however, salary is not one of them, according to the survey. Statistically significant differences in average salary were found at all levels of staff size. IT departments with fewer than ten team members at their location account for over one-third of the responses. This group had the lowest average salary at $72,157.

Average salary rises in a linear fashion with staff size. Respondents who work in teams of 10–49 people earn an average salary of $82,815, or 15% more than those in the smallest departments. Those who work in departments of 50–249 average $88,746. Those working in teams of 250 or more make $95,061, or 32% more than those in the smallest departments.

Salary by Industry

Across all industries those who manage, implement, and support IT infrastructure play a critical role in the success of their companies and organizations. **Figure 12** highlights the top 10 industries represented in the survey. This year respondents from the government sector (including federal, state and local, but excluding defense) were the largest contributor, followed by healthcare and the financial sector. This year average salaries ranged from $66,680 in education to $102,687 in IT communications manufacturing. Rounding out the top five, in terms of base salary, are software ($96,826); aerospace and defense contracting ($93,818); pharmaceutical, medical, and bio-technology ($93,664); and IT consulting ($91,668).

Salaries by Industry

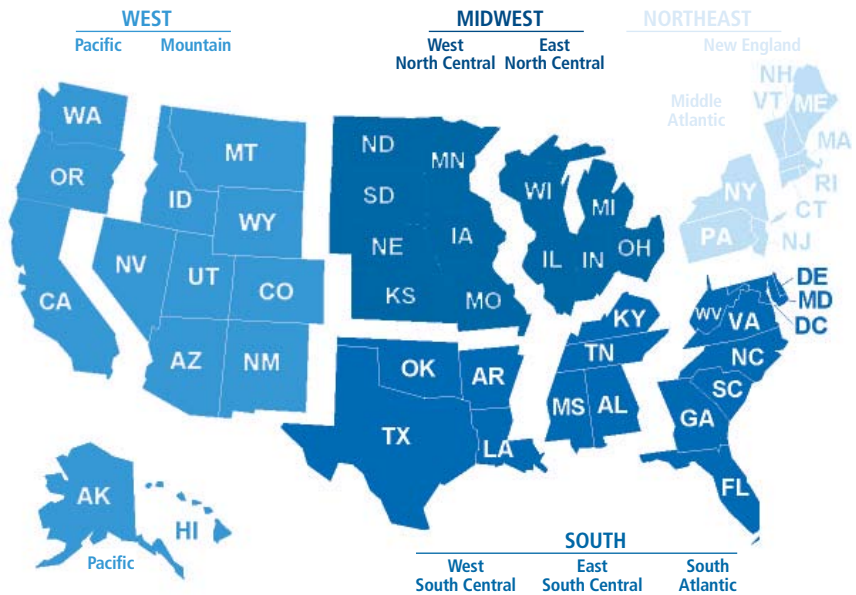
Industry	Salary	Base*
Government (non-defense)	$77,333	1,586
Healthcare	$79,623	1,561
Banking & Finance	$89,128	1,532
Education	$66,680	1,416
Telecommunications	$83,009	1,209
IT Related Services	$82,779	1,161
IT Consulting	$91,668	1,129
Insurance, Real Estate, Legal	$85,096	904
Manufacturing - Industrial	$80,012	868
Manufacturing - Consumer	$82,823	619

Figure 12 ** Number of Survey Respondents*

Geographic Impacts on Salary

As we have seen throughout this report, salary is a multi-faceted construct. Skills, industry, education, and tenure all have

Nationwide Salary Comparison



National Avg.	$82.1K

Region	
Northeast	$86.4K
West	$86.3K
South	$82.3K
Midwest	$77.2K

Division	
West North Central	$74.6K
East South Central	$78.3K
Middle Atlantic	$83.9K
New England	$89.3K
South Atlantic	$85.1K
West South Central	$79.4K
East North Central	$73.7K
Pacific	$87.8K
Mountain	$78.6K

Figure 13

an impact. One variable that cannot be dismissed is geography (**Figures 13–15**). Whether or not there is a scarcity or surplus of workers is a function of the cost of living, the diversity of the economic base, and the overall desirability of a region, among other factors. This economic fact of worker supply-and-demand can drive salaries up or down across industries.

The average salary of respondents across North America is $82,115. It ranges from $77,200 in the Midwest to over $86,400 in the Northeast. In a year when salary growth tended to be flat, the West Coast and the Rocky Mountain states saw the greatest salary increase at three percent. On a regional level, the Mid-Atlantic states of New York, Pennsylvania, Connecticut, and New Jersey had the highest average salary at over $89,300, up 3.7% from the prior year.

On a state/district level, Washington, DC had the highest average salary at $100,612 due in part to its broad base of government, defense, and consulting employees. Other top paying states include New Jersey, Maryland, Virginia, and California. The lowest average IT salaries are found in the northern plains states of Montana, Wyoming, Idaho, and the Dakotas. These states also have lower costs of living, leading in part to lower salaries.

Top 5 States by Salary	
Washington, DC	$100.6K
New Jersey	$96.2K
Maryland	$93.4K
Virginia	$92.8K
California	$91.8K

Figure 14

Bottom 5 States by Salary	
South Dakota	$66K
North Dakota	$65.4K
Idaho	$63.7K
Wyoming	$60.4K
Montana	$56.4K

Figure 15

Click here for a complete list of salaries by state.

Looking Forward

What falls will rise again, or so economic cycles seem to go. The recession will come to a close eventually and sales and spending should rise again. In fact, according to Gartner's 2010 IT Spending Forecast, global IT spending is expected to rise 4.6% this year.[4]

Respondents of this survey were asked to look into the future and predict which skill sets would be highest in demand, when projects would likely come back online, and what their business conditions would look like in six and twelve months.

Skill sets that organizations will be looking to add this year include project management, expertise in cloud computing and virtualization, data security, network administration, business analysis, and process improvement. Areas where less emphasis is projected include wireless networking, storage, unified communications, and telecommunications.

The skill sets most in demand for 2010 are also those that were most likely to receive a raise in the prior year or those with significantly higher than average base salaries.

One area that has received significant mention in recent months is predictive analytics, due in part to IBM's acquisition of SPSS in 2009. Overall, 13% of respondents expressed interest in this

area; however, various sub-segments expressed significantly more interest. Groups with a strong awareness of business intelligence and analytics include:

- Business Analysts (32%)
- Business Process Improvement (26%)
- Senior IT Management (25%)
- Marketing, Advertising, PR (21%)
- Database Administrators (19%)
- CIOs and CTOs (18%)
- Manufacturing – Consumer (18%)
- IT Consulting (17%)
- IT Directors (17%)
- IT Project Managers (17%)
- Professional Business Services (17%)
- Retail (16%)

Six out of ten respondents reported seeing IT projects returning. This skews higher for healthcare (68%), VARs in IS integration (69%), IT communications manufacturing (71%), IT consulting (68%), and logistics (75%). Industries that skew this number downward include aerospace (53%), construction (49%), retail (52%), and industrial manufacturing (56%).

Those respondents who report their current business conditions as being "slow growth" or "good overall" are twice as likely to report projects returning as those who report conditions are the worst they've ever seen. Professionals who report business is good are three times as likely to indicate they will be increasing the size of their IT staffs, versus those who say their conditions are the "worst ever" (47% vs. 15%).

Looking out to mid-2010, 59% of professionals believe conditions will be the same for their organization. Less than 10% believe conditions will worsen, with the majority of this group being those who believe their current business is the worst they've ever seen. One-third of respondents believe business conditions will be improving, with the majority being those who are currently seeing at least slow growth. More than 55% predict growth will be occurring by the end of 2010. Only three percent believe conditions will worsen.

Summary

Despite the current shadow of difficult economic times, there remains a sense of optimism amongst IT and business professionals. Business cycles rise and fall, and the majority of respondents believe their personal economic conditions and those facing their companies will begin to improve in 2010.

In reviewing the 2010 survey data, one of the most interesting discoveries was the consistency with previous years' surveys, particularly in the relationship between job performance and salary. Respondents and their managers agree that training that leads to certification improves job performance. This increase in employee effectiveness is critical to note as budgets begin to return to previous levels but still remain under scrutiny. The key, then, to job security and increasing one's salary, as born out in the data, is improving personal job performance.

Survey Methodology

The Global Knowledge/TechRepublic 2010 Salary Survey was conducted online from October 19–November 15, 2009. More than one-half million survey invitations were e-mailed to recipients from the databases of Global Knowledge, TechRepublic, and other companies. Links, including the survey invitation, also were provided in online newsletters.

The 2010 IT Salary and Skills Survey yielded more respondents than any other salary survey in the industry, with 19,529 people responding. Over 17,800 (92%) were from the United States and Canada. This online survey was powered by Global Market Insite, Inc. and tabulated using SPSS.

About Global Knowledge

Global Knowledge is the worldwide leader in IT and business training. We deliver via training centers, private facilities, and the Internet, enabling our customers to choose when, where, and how they want to receive training programs and learning services. Our more than 1,200 courses span foundational and specialized

training and certifications. Founded in 1995, Global Knowledge employs more than 1,300 people worldwide and is headquartered in Cary, NC. The company is owned by New York-based investment firm Welsh, Carson, Anderson, and Stowe. For more information, visit **www.globalknowledge.com**.

About TechRepublic

TechRepublic provides IT leaders and IT workers with resources to help meet the day-to-day demands for best practices and decision support. TechRepublic's members, representing all segments of the IT industry, turn to the site for information, advice, and tools to help them perform at the highest level. Both an online trade publication and a massive online community, TechRepublic provides IT professionals with the ultimate peer-to-peer experience for information gathering and problem solving. Now part of CBS Interactive, TechRepublic was founded in 1999 in Louisville, Kentucky, where its editorial team still has its headquarters today. Visit **www.techrepublic.com** for more information.

About the Primary Researcher

Greg Alan Timpany is the Senior Market Research Manager at Global Knowledge Training LLC. Greg has over 20 years of experience in the fields of market research, competitive intelligence, and database marketing. He has designed and implemented studies for both the consumer and business-to-business industry spaces. Prior to joining Global Knowledge, he held positions with Guitar Center, Los Angeles Times, and Wilkin Guge Marketing amongst others. Greg holds an MBA in Information Systems and Marketing from California State University, San Bernardino.

Endnotes

1. Even though some companies have cut the pay of workers, the average hourly wage has still risen 1.5–2.5 percent over the last year, depending on which government survey is examined. Average weekly pay has risen less (zero-to-one percent) because hours have been cut. But average prices have fallen. Altogether, the typical worker has received a one-to-two percent inflation-adjusted raise over the last year. "Jobless Rate Hits 10.2%, With More Underemployed," The New York Times, November 7, 2009, Section A, Business and Financial Desk, page 1.
2. There are six times as many Americans seeking work as there are job openings, and the average duration of unemployment—time the average job-seeker has spent looking for work—is more than six months, the highest level since the 1930s. "The Jobs Imperative," The New York Times, November 30, 2009, Section A, Op-Ed, page 31.
3. There are a host of IT jobs that will stay stateside. "Positions that focus on strategy, architecture, project management and relationship management are safer because you want someone doing that work who is plugged into the company and can act as the representative to the CIO." "Long-Term Effects of Recession Expected to Hurt U.S IT Jobs," eWeek.com, November 30, 2009, http://www.eweek.com/c/a/IT-Management/LongTerm-Effects-of-Recession-Expected-to-Hurt-US-IT-Jobs-389562/.
4. IT Spending Forecast, 4Q09 Update: IT Spending in 2010 and Beyond, January 2010, Gartner, Inc.